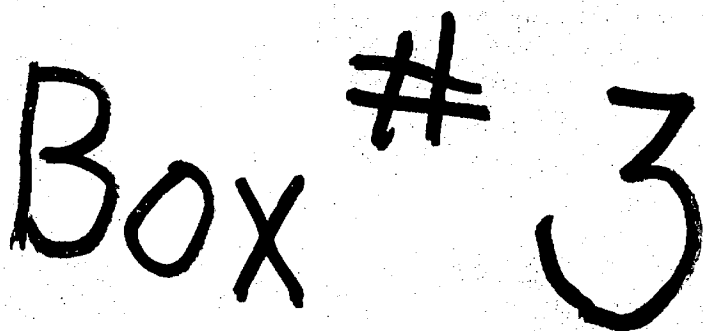
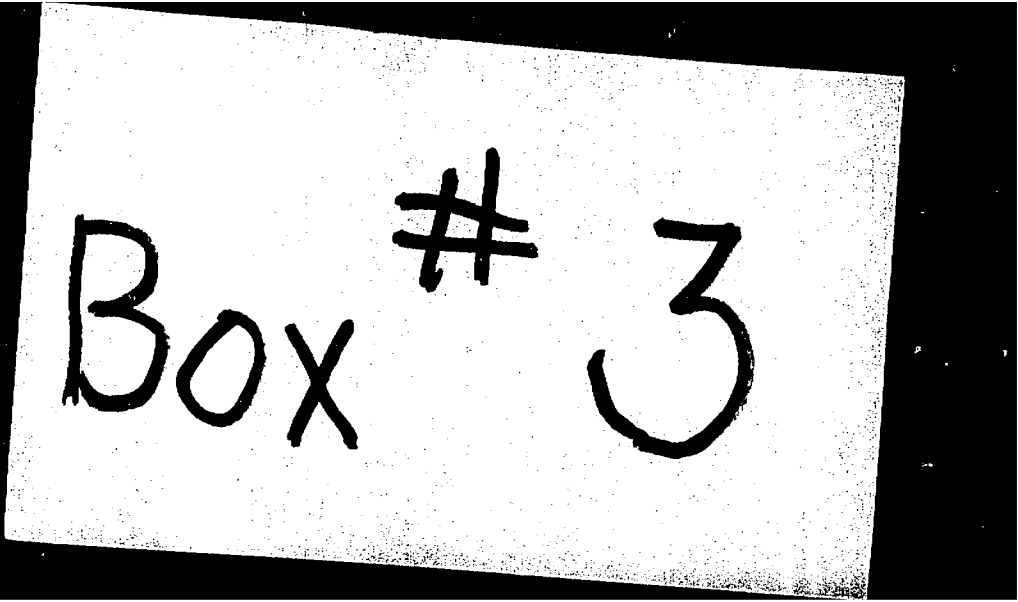


Box # 3

Box # 3



Box # 3



Box # 3

A white rectangular card with handwritten text in black ink. The text reads "Box # 3". The card is slightly tilted and set against a solid black background.

Formation of Oxide Inclusions in Semi-
Killed Steel, by E. Forster, H. Neumann.
GERMAN, per, Archiv f.d. Eisenhüttenwesen,
Vol 39, No 9, 1968, pp 645-649.
HB 7611

Sci/Materials
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Testing Carbon Brick for Resistance to the Action
of Molten Pig Iron, by B. Marincek.
GERMAN, per, Archiv f.d. Eisenhüttenwesen, Vol 39,
No 9, 1968, pp 665-667.
HB 7612

Sci-Mat
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Investigations of the Solubility of H₂
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*NBS TT 70-57271

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Embrittlement of Various Steels Through Absorption
of Hydrogen from Wet Hydrogen Sulfide, by
E. E. Hofmann.
GERMAN, per, Archiv f. d. Eisenhüttenwesen, Vol 39,
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AEC/UCRL-TR-10407-69

Sci-Mat
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Powder-Metallurgical Contributions to the
Ternary Systems Fe-W-C and Fe-Mo-C,
by W. Jellinghaus.
GERMAN, per, Arch. Eisenh, 39, 1968,
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*NBS TT 70-57279

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Mechanism and Kinetics of Reduction Reactions, by
I. Visnyovszky. GERMAN, per, Arch Eisenh, Vol 39,
Oct 1968, pp 733-740.
BISI 6933

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Manufacture of High-Quality Steels in the Lino
Crucible, by A. Schoberl.
GERMAN, per, Archiv f.d. Eisenhüttenwesen,
Vol 39, No 10, 1968, pp 741-745.
HB 7662

Sci-Mat
April 69

377,750

Measurement of the Flattening of the Rolls of a
Four-High Stand During Rolling, by P. Pawelski,
H. Schroeder.

GERMAN, per, Arch. Eisenh, Vol 39, Oct 1968,
pp 747-754.

BISI 7007

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aug 69

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On the Determination of the Particle Size
of Powder Samples by Means of X-ray Fluorescence
Analysis, by H. Ebel.
GERMAN, per, Archiv f.d. Eisenhüttenwesen,
Vol 39, No 10, 1968, pp 755-757.
HB 7664

Sci-Mat
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X-ray Spectrometric Analysis of Ferrosilicon
and Calcium-Silicon, by F. Wagner.
GERMAN, per, Archiv f.d. Eisenhüttenwesen,
Vol 39, No 10, 1968, pp 759-762.
HB 7665

Sci-Mat
Apr 69

377,756

Effect of Ti and Ta Upon Structure and
Mechanical Properties of Cast Tools of
9%W HSS, by O. Kastanek.
GERMAN, per, Arch Eisenh, Vol 39, Oct
1968, pp 763-767.
*HB 7666

Sci-Mat
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Constitution and Thermodynamic Properties of
Alloys, by T. Heumann.

GERMAN, per, Arch Eisenhuttew., No 39, 1968,
pp 783-792.

*NBS TT 70-53103

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Effect of Certain Elements on Iron Crystallization
During Solidification, by A. Rose.
GERMAN, per, Arch. Eisenh, Vol 39, No 10, Oct 1968,
pp 793-797.
BISI 6907

Sci-Materials
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Influencing the Equilibria between Carbon and
Oxygen in Molten Iron by Means of Nickel, Chromium
and Silicon, by H. Schenck, et al. GERMAN, per,
Arch Eisenh, Vol 39, Nov 1968, pp 803-808.
BISI 7200

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Importance of the Temperature and Ferrous Oxide
Content of the Slag During the Dissolution of Lime
in the Basic Open Hearth Process, by
E. Schurmann, et al.

GERMAN, per, Arch. Eisenh., Vol 39, No 11,
November 1968, pp 815-821.

BISI 7058

Sci-Mat

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The Direct Determination of Oxygen in
Oxide Materials, by W. Koch, H. Lamm.
GERMAN, per, Arch Eisenh, Vol 39, No 11,
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Testing Heat Resisting Rolling and Forging Steels
for Scaling Resistance, by H. Kohl.

GERMAN, per, Arch. Eisenh., Vol 39, No 11,
November 1968, pp 823-827.

*HB 7729

Sci-Mat
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Segregation of the Alloying Elements During
the Dendritic Solidification of Ferrous Metals,
by A. Rose, et al.

GERMAN, per, Arch Eisenh, Vol 39, Nov, 1968,
pp 829-836.

BISI 7575

Sci-Mat
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Effect of Ultrasonic Treatment Upon the Mechanical
Properties of Low Carbon Plain Steel, by

H. Kuzmany, B. Weiss.

BERMAN, per, Archiv Eisenhüttenwesen, Vol 39,
No 11, 1968, pp 837-842.

AD 7673

Sci-Mat
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Structure and Mechanical Properties of a Ferritic-austenitic Steel Containing Approximately 25% Chromium and 4% Nickel, by H. J. Schuller, H. Henneke.

GERMAN, per, Arch Eisenhutt, No 39, 1968, pp 843-848.

NLL Ref: 9022.401 (746-80)

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An Improved Specimen Stressing Device for Testing
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Stress Corrosion Using Jones-type Specimens, by
W. Hummitzsch, W. Zwintzsch.
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NLL Ref: 9022.401 (746-81)

Sci/Mat
Mar 70

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The Effect of Various Alloying Elements on the Size
of the Gamma-Phase in the Fe-Cr-C System. Part II.

The System Fe-Cr-C-Ni, by K. Bungardt.

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*NTIS/USDC/NBS TT 71-55079

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Influence of the Elements Manganese, Silicon and Aluminum on the Rate of Sulfur Transfer, by H. Schenck.
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Vol 39, No 12, 1968, pp 893-894.
HB 7746

Sci-Math
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383,261

The FeO-NiO Constitutional Diagram and the
Equilibria Between FeO-NiO (Al_2O_3) Slags and
Iron-Nickel Melts at Steelmaking Temperatures,
by H. Schenck, et al.

GERMAN, per, Arch. Eisenh., Vol 39, Dec 1968,
pp 895-901.

BISI 7112

H. Schenck

Sci-Mat
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On the Photometric Determination of the
Zirconium Content of Steel and of Its
Structural Constituents, by H. Keller,
K. Hennesen.

GERMAN, per, Archiv Eisenh, Vol 39,
No 12, 1968, pp 921-924.
HB 7709

Sci-Mat
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On the Application of Atomic Absorption
Spectroscopy in the Analysis of Oxide and Metal
Samples, by K. H. Koch, K. Chls.
GERMAN, per, Archiv Eisenhüttenwesen, Vol 39,
No 12, 1968, pp 925-928.
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Effect of Type of Cold Working and of Natural and Artificial Ageing on the Displacement of the Transition Temperature of the Notch Impact Toughness of Common Structural Steels, by G. Altmeyer and H. Farivar-Mehseni, GERMAN, per. Arch. Eisenh., Vol 39, No 12, 1968, pp 929-984.
BISI 7568

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Investigations on the Determination of the
Delta Ferrite Content in Austenitic Steels,
by P. Dunner.

GERMAN, per, Archiv Eisenh, Vol 39, No 12,
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Sci-Mat
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Determination of the Activity of Cobalt
60 in Pig Iron by Measuring the γ -Radiation,
by G. Sommerkorn,
GERMAN, per. Arch. Eisenh., Vol 39, Dec.,
1968, pp 959-962.
BISI 7733

Sci/Mat
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Saturated States of Slags of the Oxygen Top-
Blowing Process With Low Phosphorus Pig Iron and
Their Paths of Concentration in the Quasi-
Ternary System $(\text{CaO})^*-(\text{SiO}_2)^*-(\text{FeO})^*$, by
F. Bardenheuer, et al.

GERMAN, per, Arch. Eisenh., Vol 40, No 8, 1968,
pp 571-576.

*BISI 7840

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Hydrogen Solubility in Slags of the System
 $\text{CaO}-\text{FeO}-\text{SiO}_2$, by M. Wahlster, H.-H. Reichel.
GERMAN, per, Arch. Eisenh., Vol 40, No 1, 1969,
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BISI 7385

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Thermal Conductivity of Light-Weight Fireclay
Bricks in Various Gases, by H. B. Schweite.
GERMAN, per, Arch Eisenh, Vol 40, Jan 1969,
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BISI 7661

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Detection of Carbon with the Electron Microprobe,
by R. Kohlhaas, F. Scheiding.

GERMAN, per, Arch Eisenh, Vol 40, Jan 1969,
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BISI 7650

NLL Ref 9022.401 (746/118)

Sci-Mat
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Routine Employment of an Atomic Absorption
Spectrometer in the Laboratory of an Iron and
Steel Works, by P. Konig, et al.
GERMANY, per, Arch. Eisenh., Vol 40, No 1, 1969,
pp 53-56.
BISI 7383

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394,303

Effect of a Three Stage Heat Treatment on the
Mechanical Properties of Low Alloy Weldable
Steels, by K. Born, K. Haarmann.
GERMAN, per, Arch. Eisenh., Vol 40, No 1,
January 1969, pp 57-66.
BISI 7114

Sci-Mat
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The Hydrogen Diffusion and the Mechanical
Embrittlement at Electrolytic Absorption of
Hydrogen in Low-Carbon Steel, by

F. Erdmann-Jesnitser.

GERMAN, per. *val* Arch Eisenh. No 40. 1969. pp 73-80.

*NBS TT 70-57541

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Sampling of Liquid Steel for the Determination
of the Hydrogen Content, by W. Thonich.
GERMAN, per, Archiv f. d. Eisenhüttenwesen,
Vol 40, No 2, 1969, pp 121-123.
HB 7736

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The Problem of Heat-Treating Cold-Formed Tube
Bends Made From Heat-Resistant Steels, by
G. Lautenbusch, et al.
GERMAN, per, Arch. Eisenh., Vol 40, No 2, 1969,
pp 131-138.
BISI 7183

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Electrical Conductivity and Degassing of Loose
Metal Powders Under the Influence of Temperature,
by F. Fraunberger, H. Kniepkamp.
GERMAN, per, Archiv Eisenhüttenwesen, Vol 40,
No 2, 1969, pp 139-142.
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The Delta Ferrite Content of Austenitic Chrome-Nickel Steels in the Equilibrium and Disequilibrium Conditions, by H. Kohl, GERMAN, per, Archiv Eisenhüttenwesen, Vol 40, No 2, 1969, pp 143-146.
HB 7738

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A Fully Automatic Hardness Testing Apparatus
for Plotting End-Quench Curves, by
F. Stricker, H. Irmisch.
GERMAN, per, Archiv Eisenh, Vol 40, No 2,
1969, pp 159-162.
HB 7739

Sci-Mat
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Comparison of the Behaviour of Alumina and
Silica in the Reactions of Slags Rich in Lime
With Iron Melts in the Graphite Crucible, by
W. Oelsen.

GERMAN, per, Arch. Eisenh. Vol 40, No 3, 1969,
pp 201-213.

*BISI 7426

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The Combination of the Nitrogen With Soda and
Blast Furnace Slags, by H. Bosch, et al.
GERMAN, per, Arch. Eisenh., Vol 40, No 4, 1969,
pp 271-276.
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Review of Methods of Testing the Toughness of
High Strength Steels, by A. Randak, K. Vetter.
GERMAN, par, Arch. Eisenh. Vol 40, Apr 1969
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No 4, 1969, pp 297-300.
IB 7821

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Properties of Sintored Steels Produced of Unalloyed
and Alloyed Powders Obtained by Water Atomization of
Molten Steels, by N. Dautzenberg.

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NLL Ref: 9022.401 (746-200)

Sci/Mat

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Contribution to the Preparation of High-Purity Iron,
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GERMAN, per, Arch Eisenhüttenwesen, Vol 40, 1969,
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*NTIS/NBS TT 71-55297

Available NBS Only

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Contribution to the Study of Heat Treatment
from the Heat of Shaping, by H. Borchers,
et al.

GERMAN, per, Arch. Eisenh. Vol 40, No 5,
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BISI 7659

Sci-Mat
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Austenitic Grain Growth in Plain Carbon Steel
at 700-1200°C., by A. Domsa,
GERMAN, per. Arch. Eisenh., Vol 40, June, 1969,
pp 489-492.
BISI 7886

Kinetics of the Formation of Fe_3C Carbide in
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CHESMAN, per. Arch. Eisenh., Vol 40, No 6, 1969,
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BIBI 7677

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Effect of Nucleation on the Rate of Reduction
of Iron Oxides, by W. Morawietz and H. -D.
Schaefer.

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NTC 71-14106-11F

*BILSI 7981

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Acceleration of the Reduction of Iron Oxides by
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W. Morawietz and H. -D. Schaefer.
GERMAN, per, Archiv fuer das Eisenhuettenwesen,
Vol 40, 1969, pp 531-533. *no 7*
NTC 71-141-05-11F

HB 7911

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Contribution to the Cognition of the Iron Corner of
the System Iron-Vanadium-Carbon, by R. Ebeling.

GERMAN, per, Arch Eisenhüttenwesen, Vol 40, 1969,
pp 551-555.

*NTIS/NBS TT 71-55285

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AEC (ORNL-tr-2423) MARTENSITIC TRANSFORMATIONS
IN LOW-CARBON AUSTENITIC CHROME-NICKEL STEELS. :
Schumann, Hermann; von Fircks, Hans-Jochen. ¹⁶Translated
for Oak Ridge National Lab., Tenn., from Arch. Eisenhuettenw.;
40: 561-8(1969). ²⁰19p. ²⁴Dep. NTIS.

²⁵

²⁶metallurgy; translations ²⁷11F

²⁸MN-25 ²⁹P NSA

The True Constitutional Diagram and Establishment
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Nickel, by W. Koster and W. D. Eschl,
GERMAN, per. Archiv Eisenhüttenwesen, Vol 40, No 7,
1969, pp 569-574.
HB 8074

Sci/Mat
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Changes of State in the Heat Treatment of Iron-
Cobalt-Nickel Alloys with Nickel Contents of Up
to 40% and Their Effect on the Alloy Properties,
by W. Koster, W.-D. Reahl.
GERMAN, per, Archiv Eisenhüttenwesen, Vol 40,
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HB 8075

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On the Theory of Metallurgical Processes During
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GERMAN, per, Arch Eisenh, Vol 40, Aug 1969,
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BISI 7818

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The Calcium Oxide-Ferrous Oxide System as a
Basis for the Study of the Dissolution of Lime
in Steelmaking, by K. H. Oest, J. Stradtman.
GERMAN, per, Archiv Eisenhüttenwesen, Vol 40,
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GERMAN, per, Arch Eisenhüttenw, Vol 40, 1969,
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*NTIS/NBS TT 71-55185

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The Effect of Pores on the Effusion of Hydrogen
from Iron at Room Temperature, by G. Lange.
GERMAN, per, Eisenhüttenwesen, Vol 40, Aug 1969,
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C. E. Trans. 5466D

Sci-Chem
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Determination of the Tensile Strength of
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GERMAN, per, Archiv Eisenhüttenwesen, Vol 40,
No 8, 1969, pp 647-650.
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Operational Experience in the Determination of
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During Melting, by P. Konig,
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Aug 72

Aluminium Oxide and Mullite as Solid Electrolytes in Oxygen Measuring Cells, by W.A. Fischer and D. Janke,
GERMAN, per. Arch. Eisenh., Vol 40, No 9,
1969, pp 707-716.
BISI 8311

AEC (BNWL-tr-72) CARBON ACTIVITY AND SOLUBILITY
IN A STAINLESS CHROMIUM-NICKEL STEEL WITH ABOUT 18
PERCENT Cr AND 9 PERCENT Ni. Tuma, Hanus; Groebner,
Pavel; Loebl, Karel. ¹⁰Translated for Battelle Pacific Northwest
Labs., Richland, Wash., from ¹⁵Arch. Eisenhuettenw.; 40: No. 9,
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²⁸metallurgy; translations ²⁷11F

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C.E. TR-5635

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for Hot-Rolling and Forging, by O. Pawalski.
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pp 821-827.
BISI 7939

Sci-Mat
Oct 70

Atomic Absorption Spectrophotometric Analysis of
Oxides and Carbides Separated from Steel,
by K. H. Sauer and M. Nitsche,
GERMAN, per. Archiv Eisenhüttenwesen, Vol 40, No 11,
1969. 891-913
HB 8141

Sci/Mat
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Equilibria Between Molten Iron and Saturated Slags
of the System CaO-FeO-MnO-SiO_2 at 1600°C Taking
Account of the Repartition of Sulphur, by E. Gorl.
GERMAN, per, Arch Eisen, Vol 40, 1969, pp 959-967.
*BISI 8309

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Experience with an Electric Arc Smelting Furnace
[For Laboratory Use], by P. Kunig,
GERMAN, per. Archiv Eisenhüttenwesen, Vol 40, No 12,
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HB 8137

Sci/Mat
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Rapid Determination of Permeability of
[Steel] Sheet to Hydrogen, by P. Konig,
GERMAN, per. Archiv. F.D. Eisenhüttenwesen,
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HB 8138

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Experiences with Operation of an Electric Arc
Smelting Furnace, by F. Koenig, et al
GEMMEL, per. Arch. Electr., Vol 40, No 12, 1969,
pp 993-994.
*EB 8137

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Contribution to the Electrometric Determination
of Manganese, by W. Thomich,
GERMAN, per, Arch Eisenh, Vol 40, Dec 1969,
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BISI 8154

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The Coercive Field Strength of Pure Iron as
Well as of Pure Iron-Silicon and Iron-Aluminium
Alloys as Dependent on the Melting Process
and on Het Treatment, by A. Hoffmann,
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Quantitative Analysis of Organic Compounds by
Means of the Electronbeam Microprobe.

GERMAN, per: Archiv fuer das Eisenhuettenwesen.

Vol 41, No 1, 1970, pp 97-101

MO 72-12899-117

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